

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. – 4. (Cancelled)

5. (Currently Amended) A method for manufacturing an optical member which is a laminated optical member including plural lenses, one lens of which is formed of fluorite ( $\text{CaF}_2$ ), another lens of which is formed of synthetic quartz ( $\text{SiO}_2$ ), the optical member being used in the UV region from 100nm to 200nm, the method comprising:

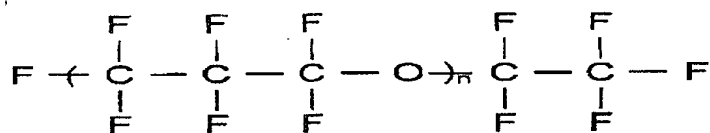
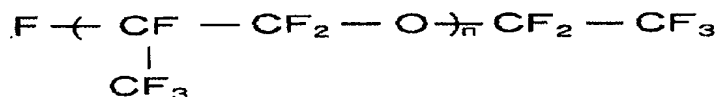
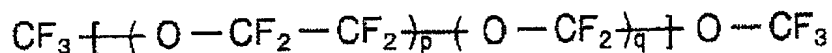
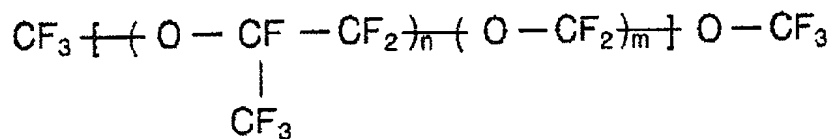
filling a fluorine-based organic compound between the plural lenses; and

sealing the whole periphery of the plural lenses with an organic solvent-soluble amorphous fluorine resin having an adhesion so as to seal the organic compound filled between the plural lenses,

wherein the fluorine-based organic compound has a thickness of about 10  $\mu\text{m}$ , and wherein the fluorine-based organic compound is such a compound that the deterioration of the optical member due to adhesion distortion is hardly observed when a KrF laser of deep UV region at 248 nm is emitted for 148 hours at an output of 3  $\text{W}/\text{cm}^2$ ,

~~wherein the fluorine-based organic compound is such that deterioration of the optical member due to adhesion distortion is avoided when the optical member is irradiated with an excimer laser of deep UV region at 248 nm wavelength for 148 hours at a laser output of 3  $\text{W}/\text{cm}^2$ ;~~

the fluorine-based organic compound having the formula (1), the formula (2), or the formula (3) as follows:

Formula 1Formula 2Formula 3

6. (Previously Presented) The method for manufacturing an optical member according to claim 5, further comprising evaporating a fluoride on a surface of the plural lenses prior to filling the fluorine-based organic compound between the plural lenses.

7. (New) The method as defined in Claim 5, wherein the optical member is used in a semiconductor inspection device.